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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/884,775      | 06/19/2001  | Joseph Zoeller       | 70895               | 2350             |

7590

01/26/2004

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| EXAMINER |
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PASTERCZYK, JAMES W

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| ART UNIT | PAPER NUMBER |
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1755

DATE MAILED: 01/26/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

A-9-4

**Office Action Summary**

Application No.

09/884,775

Applicant(s)

ZOELLER ET AL.

Examiner

J. Pasterczyk

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/19/01, 11/4/02.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. This Office action is in response to the two IDS documents filed 6/19/01 and 11/4/02.
2. The abstract of the disclosure is objected to because it discusses the reactants of the reaction to be catalyzed by the claimed composition more than it does the composition and the reactants that are used to make it. Correction is required. See MPEP § 608.01(b).
3. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear how a solid catalyst can include a vaporous component; is it that the solid component is made by using a vaporous component? If so, then product by process terminology is appropriate. It is also not clear if "useful for producing esters . . . in a vapor phase carbonylation process" is supposed to be a material limitation on the catalyst or is mere "intended use" language imparting no further material limitations to the claim; the former should recite the further limitations, while the latter should be stricken. Also problematic is the word "including"; is the group that follows mere illustration or limitative? These problems are also found in claims 11, 15 and 17. In the fifth line it is not clear what is meant by "associated with"; if the solid catalyst support material is supporting the platinum and tin components as well as the halogen promoter, this should be unequivocally recited. This problem is also found in claims 11, 15 and 17.

In claims 4, 5, 12, 15 and 17, it is not clear whether the weight percentages are to be measured as the compounds used to add the platinum and tin to the catalyst, as the bare elements themselves, as percentages of the finished catalyst, or some other measure. This is especially problematic in claim 17, which recites in l. 4-5 the weight percentage implicitly versus the

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finished catalyst, yet the following lines recite specific platinum compounds. Dependent claims 6-10, 13 and 16 also have this problem.

Further in claim 11, l. 7, insert --of-- after “amount”. The remainder of this claim recites the broad term “halogen promoting component” and the narrower range of the specified compounds. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). Claims 15 and 17 also have this problem.

Claim 14 fails to further limit claim 11 since claim 11 is drawn to a catalyst, while claim 14 recites a reactant in the process using that catalyst.

Further in claim 17, penultimate line, “methanol equivalents” lacks antecedent basis, and the phrase “methanol or methanol equivalents” along with the ratios is drawn more to the process catalyzed than to the catalyst itself, and hence fails to limit the catalyst being recited in the claim.

In claim 6, l. 1, delete “a”. Again, it is not clear how a gaseous reagent is contained in a solid catalyst.

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In claims 8, 16 and 13 "said platinum component" lacks antecedent basis.

In claims 10, 16 and 13 "said tin component" lacks antecedent basis.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Pollitzer et al., USP 4,085,067 (hereafter referred to as Pollitzer).

Pollitzer discloses the invention as presently claimed (abstract; col. 2, l. 32-44; col. 4, l. 37; col. 5, l. 50-61; col. 7, l. 14; col. 8, l. 3-40; col. 9, l. 67 to col. 10, l. 33).

6. Claims 1 and 4-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Zoeller et al., USP 6,235,673 (hereafter referred to as Zoeller I).

Zoeller I discloses the invention as claimed (abstract; col. 5, l. 11-16; col. 6, l. 24-35; col. 7, l. 14-30).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zoeller I in view of Zoeller et al., USP 6,160,163 (hereafter referred to as Zoeller II).

The disclosure of Zoeller I has been discussed above.

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Zoeller I lacks the element of the use of activated carbon as the support.

However, Zoeller II teaches that in these catalysts it is conventional to use activated carbon as the support material (col. 6, l. 49-50).

It would have been obvious to one of ordinary skill in the art to apply the teaching of Zoeller II to the disclosure of Zoeller I with a reasonable expectation of obtaining a highly-useful catalyst with the expected benefit of not needing a second noble metal and being able to use a comparatively cheap support with good surface adhesion properties.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is none.



JP

1/13/04



Mark L. Bell  
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